

OPERATIONS MANAGEMENT AND SHRINKING CRISIS

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1. Environment turbulence

The intensity of threats and opportunities of the external environment are characterized by turbulence, which includes the entire organization environment. This status (T_m), specific today to the majority of socio-economic environments is dependent on two variables:

- a) changeability (C);
 - b) predictability (P).
- It follows that $T_m = f(C, P)$

Variable C is dependent on:

- 1) the complexity of the environment (C_m) and
 - 2) the newness of the challenges the organization is facing (N_γ)
- So, $C = f(C_m, N_\gamma)$

Variable P is dependent on:

- 1) the changes' speed or their acceleration (R_s)
 - 2) visibility into future for decision making process (V_v)
- So, $P = f(R_s, V_v)$

In order to measure the turbulence, there are elaborated more "scales" that are based on assumptions such as: the future is a reception of the past, the organization focuses on the traditional market, environmental challenges are repetitions of the past ones, and the organizational changes have a shorter period then the response to change ones.

All these assumptions, **today**, are **false** in most organizations and may be seen as an exception in the nonprofit type ones.

It is important the management response to the turbulence position on the upper levels, which may be obtained by the analysis of the inequality:

$$d_{rs} > d_s$$

where:

- d_{rs} – represents duration of response to changing
 d_s – change duration

Reducing the spread between the two issues is the key to organizational success during crisis. In this context, effective management is only the intelligent, creative one. Creative managers have the ability to reformulate, to see what is hiding beyond any situation, no matter how inefficient and unfavorable it would be. Appreciative intelligence means to see the oak beyond the acorn.

2. Crisis and the operational strategy

The overall organizational strategy has as the basic split the operational strategy of goods / services processing.

This approach leads to the obtaining of goods / services of high value, possibility low costs and maintenance of market share. Processing is a powerful competitive weapon in business. Other approaches in this field such as those focused on the role of finances or marketing, without ruling out in any way the importance of these areas, may lead to crisis.

It is obvious that the behavior of “*wheeling and dealing*” type, based first on the financial world, has generated many surprises throughout the current economic-social area.

The components of operational strategy (the mission, the distinctive competence, objectives and policies) will specify four basic elements, namely: cost, quality, delivery and flexibility, otherwise the removal from the market is obvious.

In the processes of crisis, the *imitative strategies*, specific for mature markets, sensitive to price and cost, may be replaced by the *innovative* ones, specific to markets that may develop, the benefits resulting from the new products / services. Innovation is essential in turbulent processes, in which the gained expertise doesn't help any more. A good example is the economic crisis in Romania at the end of the 80s, when there was relatively more but bad production (not qualitative), devoid of innovation.

Also, we emphasize that the operational strategy of processing must be entirely elaborated as a response to external factors, due to the profound changes in the field of consumption, of resources, processing technologies etc.

3. General requirements of operations management in the turbulent environments

The first requirement imposed by the turbulent environments is the **flexibility**, which is totally an environment dependent variable. Adapting the organization to the environment, by management, is the essential action that ensures the viability of any social creation. The effort of this “alignment” to the organizational environment implies the permanent control of costs, in terms of variable tasks and relative maintaining of organizational structures.

The second requirement follows from the fact that, as the turbulence increases, the management should guide the organization on an **extroversion** path, of strong sensitivity to environment, by fructification of its opportunities and minimize threats.

The third requirement, as the predictability is reduced, is the developing of a **strategic system in real time**. But turbulence through its surprises that can not be controlled may generate crises, which requires the thinking and the development of a **crisis management system**. The chaos theory supports this concept and brings elements benefic to the management and organization. According to this theory, sensitivity to change that replaces strategy, varies between predictable and random cycles. The model to be followed is hidden in chaos, as a combination of disorder with a freer form of order called autosimilarity.

It is vital the fact that the chaos level is the source of innovation, especially in the critical points of the organizational processes.

In periods of turbulence the organizational structures are fragile, the flows of energy are necessary.

However, the “cascade” of chaos states may continue until achieving a dynamic equilibrium between organizational environment factors.

4. Turbulent environment and the managerial instruments

The turbulent, uncertain organizational environments involve new accents of managerial instruments that achieve effectiveness and efficiency. Thus, the management by objectives (MBO) comes from the two key steps of this method, namely the *derivation of the objectives from the fundamental to the individual ones* and *harmonizing resources with commitment aims*, stresses, *focuses on the second step*. At the level of each derived objective there should be checked the existence of resources (human, material, financial,

informational) to harmonize them with their purposes, including the using of the negotiating method in all its forms.

Concerning the management by *exceptions* method (MBE), the turbulent environments require “*dropping*” the management activities at the level of operating centers, of direct executives, in all functions, including the evaluation and control and not only the focus but also the “Exceptions” approach, or the benefit of their inexistence.

Another way that we consider to be extremely useful for turbulent environments is *TCR / total cost and risk*.

Total cost and risk in management crisis have a great problem @to measure the cost of change for live the crisis”.

My vision is:

$$TCR = \sum_k (C_i^k + \sum P_j^k R_j^k)$$

where:

TCR represent total cost and risk

C_i^k - the cost of change for a managerial type *k* activity, such as inefficient / dissatisfaction

P_j^k - the probability of the risk *j*, in a *k* managerial activity.

The exposed methods, and also the others within the methodological device of management (MBP, MBB, TCR) bring to the fore, in conditions of turbulence, the *decentralization* as a way of strengthening the top management. It follows that within an organization the decision power should be reconsidered on the hierarchically way or circuit, in the sense of attracting a few activities to the operation centers, without eliminating or reducing the excessive power of decision at the upper levels.

A cultural “*background*” for this condition is provided by the organizational culture *created by Hofstede*.

5. Out crisis and the organizational culture

The rational model in turbulent conditions for the organization system means the transfer from the dominant organizational culture “*beton the organization*” (or some “*person*” subculture) to the category of culture formulated by Hofstede or the “*work and certainty*” subculture. Regarding the first typology designed by Hofstede, we consider that the organization staff activity will be more and more individualism, and independent thinking and action, without minimizing the system’s integrity.

The two dimension - individualism and independence – allow the network treatment of the organizational process, the subordinates in the acceptance of the responsibility, the last ones are free to prove their skills, because performance is important for the entire system.

“The power action area” in the analyzed system is more and more minimized, that is the first feature of the culture elaborated by Hofstede.

The new system also contains the masculinity starting from the individual to the entire system, it is desired a controlled profit, far from the “*money dimension*” in the business world.

The four dimensions individualism, common sense, the power action area and masculinity form a completed symmetric graph (fig.1).

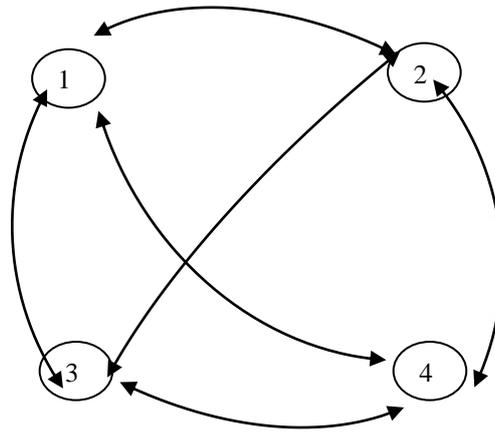


Figure 1

There mustn't be excluded any "arches" between "nodes", the approach is configurative and not contingency.

In some organizations where the personalities are restricted, the subculture "work and certainty" is accepted, as a function with two variables: the minimized risk, the high feedback.

The two variables, especially the later, are emphasized by the new advancing system based on stringent criteria and periodical evaluation to acknowledge the value.

Conclusions

From the analysis of organizational realities, results that within a relatively short period of time, there was a shift from a stable to a turbulent environment; this requires the transfer from one mechanical model, to a *staff and line* one, matrix, organic or even fractal one.

The management in turbulent environments is lacking effectiveness and efficiency, whether using classical instruments. It must have improvements of the type we have attempted to shape above. Also is essential innovation strategy and not imitative strategies.

References

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